

ASSOCIATING MULTIPLE DISPLAY UNITS IN A GROUPED SERVER ENVIRONMENT

ABSTRACT OF THE DISCLOSURE

5 The present invention provides a mechanism for grouping several standard computers, such as HIDs, and making them act as one for the purpose of building a multi-head display. In one embodiment, the servers are augmented to identify the HIDs as either “primary” terminals or “secondaries”. A primary terminal is one where a keyboard, mouse or other attachment should be made or one where the user has inserted a smart card. All other terminals are deemed secondaries.

10 In one embodiment, a set of policy modules decides whether computational service should be provided to the HID and, if so, what type of service. The policy module is consulted whenever a new HID connects to the network, when the authentication token is changed, when the HID is commanded to connect to a different server, or when the computational service exists. The policy module looks the HID up in a database using a unique identification string from the HID. If the

15 HID is not a secondary terminal within a terminal group (e.g., either a primary terminal or an HID not part of any group), the module takes no action, allowing other policy modules to make their decisions in the usual way. However, if the HID is a secondary, the module consults all the computational servers within the group to see if the primary terminal of the group presently has an active session connected to any of the servers. If the primary terminal is being controlled by the

20 same server to which the secondary HID is connected, the session connection information for the primary is augmented to indicate that the secondary is attached to the same session, and this information is disseminated to the interested software entities. No separate session is created for the secondary; however, the session associated with the primary terminal may provide output to the secondary. Alternatively, if the primary terminal is being controlled by another server in the group,

the HID is commanded to re-attach to the same server that is hosting the primary terminal. Finally, if the primary terminal is not attached to any server, a special session is presented that consists of an icon indicating that the secondary is waiting to find the primary. The process implementing this session continually queries to see if the primary has attached to any of the servers in the group. If

- 5 so, the session exits, restarting the authentication process.